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THE ETHER INHALATION IN PARIS.

To the Editor of the Boston Medical and Surgical Journal.

MY DEAR SIR,—You and the readers of your Journal may like to learn something of the introduction into Paris of the inhalation of sulphuric ether, and of the views of the French medical professors in regard to its power in destroying sensibility to pain, its usefulness in surgical operations, and in the alleviation of physical suffering.

In November last I received from a medical friend a letter, in which he informed me of the discovery made by Dr. C. T. Jackson, that the inhalation into the lungs of sulphuric ether would render patients insensible to pain during surgical operations, and that two operations unattended by pain had been performed at the Massachusetts General Hospital on patients while under its influence. I should have been cautious in giving credence to this report had it reached me through the pages of a medical or other Journal; but having been communicated to me by my former medical instructer, I could entertain no doubt of its truth. In a day or two after the reception of my friend's letter, I called on M. Velpeau and read to him its interesting contents. He seemed much interested in the statement, but expressed much incredulity as to the virtues claimed for the ether. I expressed a wish that he would make an experiment with it on some one of his surgical patients, to determine the question of its power over sensibility. This proposal he politely declined to comply with—being more influenced, as I thought, by a disbelief in the efficacy of the ether in destroying sensibility, than by the fear he entertained of any injurious effect the inhalation of it might have on the health of his patient. It has often been said by those who profess to be familiar with the character and prejudices of the French medical professors, that they are unwilling to acknowledge that anything original in medical science can be discovered out of France; and that a discovery valuable to the healing art can be made in America, 3500 miles from Paris, is in their opinion impossible—that an idea of such a phenomenon is *tout a fait abnormal!* This is a severe reflection on the character of the physicians and surgeons of Paris, and in my opinion ungenerous and unjust. I have made the acquaintance of a number of them, and nobler, more liberal and generous minds than those of Velpeau, Andral, Louis, Roux, Lugol, and others, cannot be met with in any city or country. In the hospital, in the lecture-room, and at their meetings for the discussion of medical

subjects, the French medical professor exhibits no such confined and illiberal notions or feelings as those above alluded to. And yet I cannot resist the conviction, that, if the discoveries made in Boston—that of cerebral auscultation, and the one under consideration—had been made in Paris, the whole medical faculty of the capital would have readily engaged in their investigation. There is one characteristic which I think may be said to be peculiar to the French medical savant, and it is one worthy of the true philosopher. The moment a new discovery has been proclaimed and supported by evidence sufficiently abundant to claim his attention, he proceeds at once to institute, on a broad and varied plan, a series of observations and experiments for the purpose of testing its reality and value, and perseveres in his labor, with all the ardor of a youthful discoverer, until the question is determined. Such, I doubt not, will be their course with respect to the two discoveries alluded to, when these shall have become "fixed facts" in Paris.

Having failed in my endeavor to induce M. Velpeau, and one or two other surgeons, to make an experiment with the ether, and feeling a strong desire that the discovery of Dr. Jackson should be brought, without loss of time, to the notice of the profession of Paris, I decided to inhale the ether myself in the presence of witnesses—being confident, that if the experiment should prove successful, it would induce the medical officers of the hospitals who should hear of it, to make similar experiments, and to become interested in the subject. At the time I resolved to breathe the ether I was suffering severely from the toothache, and had determined to have the offending tooth extracted. Having made an appointment with a dentist, I went to his office with my friend Dr. Mason, and there, in the presence of some other professional gentlemen, I commenced inhaling the ethereal vapor from a rude apparatus I had constructed for the occasion. I continued the process for about a minute, when my friends, on observing me to be much excited, objected to my continuing the inhalation longer, and took the instrument from me. The experiment, therefore, proved a failure, but not a total one, for a feeling of stupor and drowsiness succeeded the excitement which the ether produced in me. This result, however, had no influence over incredulity. The unsuccessfulness of this experiment did not weaken my faith in the power ascribed to the ether, and I still urged my friends to make experiments. On the 15th of December M. Jobert invited me to visit the Hospital Saint Louis and administer the ether to one of his patients. I accepted the invitation. The inhaler I employed on this occasion was similar to those now used in Boston, except that it was not provided with valves.

The patient who was to be the subject of the experiment had a cancer of the lip; and in consequence of the morbid condition and tenderness of the organ, he experienced a difficulty in applying his mouth to the opening of the glass globe, and found it quite impossible to inhale the vapor with the requisite facility and rapidity. After inhaling the ether for a few minutes he became partially affected by it, but not sufficiently to produce insensibility, or to satisfy the surgeon, whose faith in the suc-

cess of this new application of ether was not very strong. Nothing more was attempted in the way of experiments with the ether, until the reports of the American and English surgeons, and the letters of Drs. Ware and Warren of Boston, in regard to it, were published in the Medical Journals of Paris. Then a new interest in the subject was manifested by the faculty, and a number of experiments with the "letheon" were made by surgeons.

On the 12th of January, M. Malgaigne reported to the Academy of Medicine the results of four operations performed on patients at the Hospital Saint Louis, while under the influence of the ether. The announcement of these results gave rise to an animated discussion of the properties of sulphuric ether. M. Velpeau stated, that some six weeks ago, he had been advised by a young American student of this new application of ether in his native city, and had been requested by him to make an experiment with it; that since that time he had received a letter from Boston, in which a most gratifying account of its success was given by the writer. "Still," said M. Velpeau, "I did not dare to make the experiment. Sulphuric ether is a substance, the full effects of which on the system are yet unknown, and I have refrained from administering it to patients by inhalation, through a fear that the free and full inspiration of it might occasion grave and perhaps fatal accidents." Before he could feel himself authorized to employ sulphuric ether in the manner now proposed, and in surgical operations, this distinguished professor declared that he must know more of its properties, and of the influence it is capable of exercising over the various organs and functions of the body, and whether its power in deadening sensibility would be lasting enough to render it available in lengthy operations. Other members of the Academy were of the opinion that the fears of M. Velpeau in regard to the danger of inhaling sulphuric ether, were unreasonable, and unauthorized by facts or experiments. M. Guibout stated that he had within a short period inhaled ether in considerable volumes without having experienced any inconvenience. Another member expressed the opinion that the structure of the lungs must suffer from the inhalation of the article—and a third and a fourth, that the functions of the heart and brain would be deranged, and perhaps permanently so, by the process. All the members, however, were of the opinion that more information was demanded in order to authorize the free employment of the ethereal inhalation—that hitherto the experiments with the ether had been made in Paris without caution, without a proper apparatus, without a specific purpose, and without a consideration of the physical condition of the patient. All this was true, and it is unfortunate that most of the experiments have been made by those who were unprepared to investigate so important a subject, and who were ambitious of notoriety. This discussion seemed to result in the general opinion that the discovery in question was one of great importance —the beneficial applications of which no one now could foresee or predict.

At the meeting of the Academy on the 18th of January, the subject was again discussed by its members. During the week that had passed, numerous experiments had been made with the ether, and with varied

success. But the majority of the experiments were failures. Some were partially successful, but none perfectly so. This was doubtless owing to the imperfection of the instruments used, and the impurity of the sulphuric ether. The instruments employed as inhalers were of various kinds, and consisted of phials, bottles, glass tunnels, retorts, &c. In fact, the mechanical ingenuity of all Paris was put in requisition to construct an apparatus which would serve the purpose. Fortunately for the sanity of the organ of constructiveness, it so happened that, at this moment of anxiety, one of the Boston inhalers, armed with sponge and valves, reached me. It was sent me by a friend, and was an unexpected present, for which I beg to render to the kind donor my warmest thanks. On the day after its reception, I exhibited it to MM. Velpeau, Roux, Louis, Ricord, Lugol and others, all of whom examined it with much attention, and were highly delighted with the simplicity of its construction.

On the 23d of January, by invitation of M. Roux, I went to the Hospital, Hotel Dieu, and administered the ether to a patient by means of the Boston inhaler, and, I am happy to say, with perfect success. The patient came under the influence of the vapor in the space of three minutes, and was rendered perfectly insensible. M. Roux then performed a surgical operation on him, without his exhibiting any signs of suffering. On the same day M. Velpeau performed an operation on a patient at La Charité Hospital under like circumstances, and with like fortunate results. These successful experiments have dissipated the doubts these distinguished practitioners at first entertained of the reality of the newly-discovered powers of the ether, and all those surgeons who received the first accounts of them with distrust and incredulity, are now unanimous in according to the discovery great value, and in declaring it to be worthy of the age. At the present moment this discovery is the principal topic of remark, not only among the medical men of the capital, but also among all who take an interest in the progress of science, and in the alleviation of human suffering. It has, indeed, taken full possession of the French mind. The planet Le Verrier and the gun cotton are no longer thought of in Paris.

The inhalation of the ether is now employed in all surgical operations, both great and small. It has been employed even to assist parturition! M. Deschamps, having given ergot to a patient ineffectually, administered to her the ether, and terminated the labor by the forceps, while she was in a state of insensibility. Nor have the experiments with the ether been confined to the human subject. At the Veterinary Hospital at Alfort, horses, dogs and other animals have been made to inhale the vapor, and operations have been performed on them without the manifestation of pain.

Such has been the introduction and the success of this great discovery in France. As yet I have heard of no unfortunate accidents resulting from the various applications that have been made with the ether. But before its full virtues are established, many a poor fellow will doubtless fall a victim to it—or, rather, to the experiments made with it. From the little experimental knowledge I have of the new application of this old medicine, I am inclined to form high hopes of its future destiny. It

has already been found useful in surgery, in dentistry, and in one instance in midwifery. I see no reason why it should not prove useful in cases of luxations, of strangulated hernia, and especially in that terrible malady, tetanus. Should such prove to be the fortunes of the discovery, then it will have been proved that Velpeau and Roux did not err when they said, in the presence of the two Academies, that "it was a glorious conquest for humanity." When such remarks fell from the lips of such men, and when I witnessed the approbation with which they were received by the members of these learned societies, I felt, I must confess, some little national pride, in the reflection, that the discovery, which was creating so great a sensation, was made in my own country, in my native city, and by a distinguished chemist, whose honorable attainments and character are familiar to me.

The honor of this discovery is universally and fully awarded to Dr. Jackson by the members of the Academies. As in America, so in France, individuals have endeavored to tear the crown from the brow of Dr. Jackson. M. Ducros is the most prominent person here who contends for the priority of discovery. He bases his claim upon a memoir addressed to the Academy of Sciences on the 16th of March, 1846, entitled "Effets Physiologique de l'Ether Sulphurique, d'apres la Methode Buccale et Pharyngienne, chez l'Homme et chez les Animaux," in which he recognized the power of sulphuric ether in producing a state of catalepsy or syncope. But neither the facts nor inferences contained in this memoir give to its author the least title to the discovery which Dr. Jackson has given to the world.

From this time I will endeavor, so far as I may be able, to keep you informed of the fortunes of the ethereal inhalation in France, and in other parts of Europe.

It may be gratifying to the inventor of the Boston inhaler to learn, that the one sent me has been universally admired, and has served as a model for all those that are now used in Paris. The only improvement made in the apparatus, or that has been suggested here, consists in the addition of a flexible tube, extending from the globe to the mouth-piece, which enables the patient to inhale while in a recumbent position.

Yours, &c.

Paris, February 1st, 1847. F. Willis Fisher.

GREEN ON BRONCHITIS—DR. REESE'S REPLY TO "M."

[Communicated for the Boston Medical and Surgical Journal.]

An *anonymous* writer, who dates at Boston and signs himself M., having failed to appreciate my forbearance in declining to take notice of his former impertinence, has now had the temerity to hazard another personal assault upon me from behind his masked battery, in defence of his friend Dr. Green and his book, which indeed they both sadly require. And though his sneers at my religious profession, introduced into a purely medical controversy, betray the desperation of his cause, and would justify

my treating him with silent contempt; yet the repetition of his barking will now entitle him to the only notice I can take of him while he conceals his name.

In thus allegorically retorting to the "fighting propensities" of your correspondent, I shall not call hard names, but content myself with proving that he deserves them. Though if I were to follow his example, both his ignorance and falsehood will be seen to merit as offensive epithets as any of those with which he has defiled your pages. The following narrative of the facts of the case is submitted, and "mark how a plain tale will put the slanderer down."

1st. On the first day of December last, an anonymous notice appeared in the New York Commercial, of Dr. Green and his book, lauding both *ad nauseam*, and claiming for him the merit of a *discovery* in the healing art, new to the profession, and ranking the author beside the illustrious Jenner!

2d. *The day after*,* and before reading the book, I wrote and sent to the editors, a reply to *that notice*, having previously learned that it was only a *ready-made puff*, sent with the first copy by the publishers, and, as I had a right to infer, with the privacy and connivance of the author. I then contented myself with showing that our French confreres were unjustly robbed of their prior claim to the discovery, if such it was, which this writer alleged for Dr. Green, and remonstrated against so gross plagiarism.

3d. I forthwith procured the book, and having read it, I found that the author had himself fully set forth in his Introduction, all the fictitious pretensions so indiscreetly made in the newspapers on his behalf. Anticipating the charge of plagiarism itself, he alludes to the work of Trousseau and Belloc, disclaims all indebtedness to them, by affirming that he had been practising on their method "two years before he had even heard of them," and to make this fiction plausible, he declares that their book was published in this country in 1841. I turned at once to the volume lying on my table, "in book form" too, bearing the imprint of 1839; and being a presentation copy from the translator, Dr. Warder, of Cincinnati, has his autograph of the same year, bearing date September, 1839. But still worse, I found that besides repeating that their book was published *soon after* his researches, instead of *long before*, I saw that Dr. Green distinctly ascribed his own discovery of "entering the larynx" to a private conversation with the late Dr. Johnson, *since dead*, who suggested the idea as desirable, acting upon which he (Dr. G.) "happily succeeded." Unable to reconcile this "idea" of Dr. Johnson, suggested in 1838, with his previous reviews, written by his own hand, of the work of Trousseau and Belloc, my charity ascribed it to some mistake, like that of the date already alluded to. I therefore wrote the review of the book on the 8th of December which appeared on the 16th, and by reason of the crowded state of the columns of the Commercial, the previous

* Delayed by the editors till the 16th of December.

reply to Dr. G.'s eulogist appeared on the same day, having been delayed in the hands of the editors nearly two weeks for want of room.

4th. Instead of the prompt disclaimer of all pretensions to discovery on the part of Dr. Green which he owed to his own character and to the truth, together with such explanation as he could furnish of the incongruities of his Introduction, and the inconsistencies between these and his book, both he and his friends have relied for his vindication upon a few meagre allusions in his book to the work of Trousseau and Belloc, and his subsequent admissions concerning their claims; although these are palpable contradictions of the pretence made by himself, that "so far as he is concerned he awards them no merit for originality." See his Introduction, already cited.

5th. It was this "effrontery, or rather foolhardiness," which at length prompted the thorough exposure of the parties, through your Journal, under my own name, which has so "wrung the withers of the galled jade," whose "wincing" over the signature of M. has exhibited to your readers, the contortions and distortions of rabid frenzy, which adorn the last No. of your Journal. He confesses that he was in as happy ignorance of the work of Trousseau and Belloc, either French or English, until he was enlightened by Dr. Green, as he falsely surmises me to have been; and he admits himself to have "taken the hint" from Dr. G. of even applying the sponge to "the fauces and pharynx," which he says he has frequently done "in accordance with Dr. G.'s instructions." He must surely be a docile pupil, or perhaps a "grateful patient," for he swallows most readily the monstrous falsehood, that the English translation of Trousseau and Belloc's work "did not assume a book form until 1841," when if this *Boston* critic will only *happen* in New York, he will find it in the library of every reading physician; or when he next *visits* Boston, if he will inquire in any medical book store or library, he will see how he has been gulled, by looking at the imprint upon the title-page. Nor is there a copy in existence anywhere in our language, bearing any other date than 1839, this having been the only edition ever published.

Having thus disposed of the mysticism and rhodomontade of your correspondent M., you may rest assured that no provocation whatever shall induce me to trouble you or your readers again on this subject. I have done my duty in this regard, and if anybody in the profession, or out of it, should henceforth choose to adopt "Green on *Bronchitis*," as their text-book, they have my full consent, now that I have reached my *finale* in this profitless controversy, into which I have been drawn by those, who have wofully committed themselves, by reason of lagging behind the intelligence of the profession, and failing to keep posted up in the progress of their science. If it serve to teach such the salutary lesson, never to undertake to enlighten the public on subjects of which they are ignorant, I can afford to bear their contumely, for the sake of so auspicious a result.

New York, March 2, 1847. D. MEREDITH REESE.

INHALATION OF SULPHURIC ETHER, WITH PRACTICAL REMARKS.

By J. A. Allen, M.D., Middlebury, Vt.

[Communicated for the Boston Medical and Surgical Journal.]

The vapor of sulphuric ether has recently been administered, by a gentleman duly qualified, to two of my patients who were about to undergo surgical operations.

The first was for the removal of a fatty tumor, being about the size of a large turkey's egg, and situated on the left side over the angle of the ribs. The patient, a farmer, 40 years of age, was possessed of a tolerably good constitution, of a sanguine temperament, and of a sensitive habit. On the inhalation of the letheon for two or three minutes, he became under its influence. I immediately made two semi-circular incisions deep into the cellular tissue, on the sides of the tumor in an oblique direction with the body, then raised the tumor with my left hand and proceeded to dissect it from its lodgement, when it was announced that he had lost the influence of the ether. However, the operation was so nearly completed that I proceeded, and in about one fourth of a minute the whole thing was excised. The duration of the cutting part of the operation did not exceed four minutes. In a few minutes he recovered his consciousness, and stated that he knew all the time what we were doing, and said, "*I experienced little or no pain*" till some one said "he is out of its influence," after this, said he, "*it hurt like sixty.*" Only a small quantity of blood was lost; no artery required ligature. After waiting a short time, the wound was drawn together with adhesive strips, and he soon started for home, a distance of ten or twelve miles. From the operation he did not appear to experience any shock whatever. The operation was performed at Dr. J. Rice's, Bridport, in the presence of Drs. Haile and Goodrich, Crownpoint, N. Y., who had accompanied the patient, Mr. Nichols, for the purpose of witnessing the effect of the ethereal vapor.

On the 6th instant, assisted by Dr. H. A. Smith, of New Haven, and my son, Charles Linnæus, I removed a carcinomatous breast from a lady 50 years of age. Nine years since she first discovered a tumor in her right breast, somewhat below the nipple and towards the axilla. This had gradually enlarged till it involved full one half of the breast. A tubercle some months since had projected on the side of the breast towards the right shoulder. Two months since it had become ulcerated, and recently a considerable portion of it had sloughed off. The whole tumor was of a stony hardness and easily moveable over the pectoral muscle. She had no uterine or pulmonary difficulty; the glands of the axilla and those of other parts of the system, so far as we could discover, were free from any participation of the disease. Under these circumstances she was advised to inhale the ethereal vapor, and have the breast amputated. To this she readily consented.

At the outset an unexpected circumstance produced considerable delay. The administrator of the ether had supposed he had instructed the patient in the method of inhalation. But when she attempted it, in reality she entirely failed. However, on further instruction, she succeeded in the pro-

cess, and in less than two minutes after she began to inhale the vapor regularly, she became apparently fully narcotized.

I made a curved incision over the tendon of the pectoral muscle, and extended it under the breast towards the sternum, sufficient in length to include the whole breast. This, by a few subsequent cuts with the bistoury, was carried to the pectoral muscle. A similar curved incision was then made from the upper extremity of the fist above the nipple, to the lower point. It was now announced that she was losing the influence of the ether. The operative process was now suspended a minute or two; during this period she made three or four more inhalations, and again became in appearance insensible. The whole diseased mass and breast were speedily removed. The time occupied in the operation did not exceed six minutes. Only one artery required the ligature. During most of the time of its removal she occasionally groaned, and complained of her arms being held too tight and too far back, but made no complaint of anything in relation to the breast. On recovering her consciousness, she said she was aware all the time that we were doing something, and thought I "*was pinching her breast*," and added, "I did not take enough; if I had inhaled two or three times more I should have been wholly unconscious." Her opinion was probably correct. For some time she complained of sickness at the stomach, but did not vomit, as it is reported in a late No. of the New York Medical and Surgical Reporter that Dr. Collins's patient did. The sickness was unquestionably caused by her accidentally swallowing some of the ethereal vapor. The wound was not closed for several hours, and during this period she only complained of its smarting. Afterwards, little or no shock of the system was experienced, and she had no faintness or sinking.

As we had reason to expect from the influence of so large a wound, she suffered considerably during the incipient stage of inflammation; but when suppuration was established, she became quite comfortable. On the eighth day she sat up, enjoyed company, and the wound appeared in a healthy condition.

From the effect of the ether in these cases, from the several reported cases in the medical periodicals which have fallen under my observation, and from its influence which I have repeatedly witnessed when used in dentistry, the conclusion seems to be inevitable that this agent possesses the power of producing temporarily a suspension of sensibility and consciousness, and on this account hardly a doubt remains of its importance and utility in many cases of operative surgery. In fact, it is obviously better adapted for use in surgical operations than for those of dentistry. The reason is plain—because when administered the person sometimes closes the mouth; at others, the mouth is partially open, the jaws often not in apposition, but oblique or asquint. And occasionally, the patient is constantly talking. All these inconveniences are avoided in surgical cases, except when the part to be operated on happens to be the lips or immediate vicinity of the mouth.

Whether the letheon or ethereal vapor possesses any advantage over the protoxide of nitrogen, I have no facts from which to form an opinion.

It would appear, from a paper lately published in this periodical by Dr. P. W. Ellsworth, that if the two substances do not produce, when properly inhaled, precisely the same effects, they are, to say the least, extremely analogous. The same expression of countenance, the same exhilaration, and the same apparent effects are produced by the use of either. And the inference amounts at least to a strong presumption that, when either is inhaled beyond the point of excitement, an obtunded sensibility or narcosis will be induced

There are two important and valuable points gained from the use of the letheon in many cases of operative surgery. The first is the mitigation of the sufferings of the patient in some cases, and in many an entire prevention of pain. This, in a great measure, removes the anxiety and terror experienced by all to a greater or less degree preceding an operation. The second may be regarded as a sequence of the former; that is, by the prevention of the realization of pain during the operation, the shock to the system, which is generally experienced after every painful surgical operation, is avoided.

I am aware that some persons, by a due preparation of the mind, will endure the pain, of an amputation of a limb for instance, without manifesting any particular emotion. I have had several such cases. But the mental effort generally augments the impression on the system, and, usually, after such an unnatural effort the person experiences a depression, or kind of collapse, which, in several instances in my practice, for some time appeared alarming.

I know, indeed, that it has been asserted by high authority, that the inhalation of the ethereal vapor is an equivocal and dangerous expedient; that bad and sometimes fatal results have occurred from its use. But, where have these accidents occurred? What were the facts in relation to them? The importance of the subject certainly requires a candid, careful, and rigid investigation, separate from all personal, local or selfish considerations. As no evil has resulted from its use in this region, I am dependent on the reported and published cases which have come under my observation for an opinion. In these cases, admitting that those to whom it has been administered were suitable subjects, the inhalation itself has carried its own evidence that there was some error or defect. In these unfavorable cases the inhalation has lasted from twenty minutes to half an hour, and even longer. This fact alone is sufficient to show that some defect existed, either in the ether used or in its administration. It is a fact well known, that when good ether is inhaled to produce exhilaration, for amusement, only a few minutes are required before its influence is experienced. Sir H. Davy was able to respire the protoxide of nitrogen only about "*four minutes.*" Good ether is probably equally efficient in its effects with this gas, and the excitement produced by the former is speedily followed by its narcotic influence. "At first," said a gentleman who inhaled the ether for the purpose of having a tooth extracted, "I felt as though I could not sit still, but immediately I became lost."

The primary excitement induced, and the powerful subsequent narcosis

which ensues, on the inhalation of this agent, plainly show its surprising power. And the conclusion appears to follow as a corollary, that its use may be attended with pernicious, as well as advantageous, consequences. Many years since, the *dephlogisticated air* of Priestly, or the protoxide of nitrogen, was found to have a different effect on different persons; on individuals of a plethoric habit, it sometimes produces giddiness, headache and other disagreeable symptoms. The same unpleasant consequences may be expected from an injudicious use of the ether. To persons affected with disease either of the brain, lungs or heart, it probably cannot be administered without danger; or to those possessed of morbid sensibility, especially if at the time they were under much excitement. As a general rule, I would not suffer the use of the letheon, or advise its use, in a case where any local or constitutional objection was suspected.

February 18*th*, 1847.

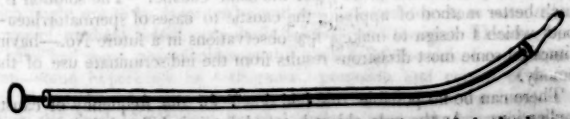
OBSERVATIONS ON STRICTURE OF THE URETHRA.

By Edward H. Dixon, M.D., of New York.

[Communicated for the Boston Medical and Surgical Journal.]

Having thus briefly considered the proper choice of the bougie and the legitimate use of caustic, there remains to notice the mechanical means for the application of caustic to the centre of the stricture, the frequency of its use, the proper intervals of time for passing the bougie, and the time for it to remain at each application.

When we can introduce with some difficulty the point of a bougie, such as we have described, into the mouth of a stricture, and the patient expresses, upon very moderate pressure, the assurance that he feels a great deal of pain, it is best to withdraw the instrument for that time, taking it for granted that the irritability of the membrane is too great; the part is not yet used to it. Should the irritation in urinating be excessive the next day (for it is always best to pass the bougie and all other remedies just before retiring) it will be advisable to give gtts. xxv. of liquor potassæ in half a tumbler of buchu tea, morning and evening; this will overcome the ardor urinæ, and, on the ensuing night, a solution of the nitrate of silver, grs. x. to the ounce of water, may be thrown *into the stricture* by means of a catheter thus constructed and curved.



It is nothing more than a catheter syringe, having a hole in its end, not larger than a pin would enter. The curve being no greater than here represented, permits its application to any part of the urethra; whilst the small and oval perforated point will allow it to be insinuated into the mouth of the stricture, and in all probability bring their openings in direct

apposition. Holding it firmly yet gently against the stricture, the patient lying down so as to secure the advantage of the fluid's gravitation, with a sudden stroke inject not more than half a teaspoonful into the stricture. It may be well to observe, however, that no more than this quantity should be taken up, or there would be no other assurance of not using too much and causing thereby needless irritation in the sound part of the urethra, anterior to the stricture, where we know some of it always regurgitates. Still there is no use in ensuring an undesirable result.

Now, any one inclined to doubt the efficacy of this practice, will do well, in the absence of personal experience, to call to mind the great comfort of caustic applications to aphthæ in the mouth, to some cases of irritable and scrofulous eye-lids, with corneal ulcers, &c. &c. The cases are precisely analogous; and the result of the practice, when applied to the stricture, will be found, that on the next night, or perhaps the ensuing one, a larger bougie may be passed, with less pressure and pain.

This method cannot take the place of the application of solid caustic, although we may increase the solution (with proper experience in the individual case to which it is applied) to twenty grains to the ounce, and even more; still when it is desirable to make a more permanent impression upon the mouth of the stricture, without the desire of doing anything more than *altering the action of the part*, we shall often find it desirable to use the pure caustic.

I am in the habit of applying it with an instrument precisely similar in exterior form to the one figured above, only instead of the piston there is a probe point equal to a pin's head in size, and this passes through a hole of equal capacity in the end. In this hole put a few particles of caustic, not larger in all than a very small pin's head, protected with a very little belladonna from the mucus of the urethra, and also to keep them in place. As soon as you are satisfied you have reached the stricture, press them forward by means of the probed wire, guaging the distance about the eighth of an inch with your finger nail; this will thrust the caustic out of the bore of the catheter directly against the stricture, and in all probability into its mouth.

The choice to be made between the solid caustic and the solution, must rest with the practitioner; the principal use of the solution is one for which the solid is not adapted, viz., it enters *into* the stricture. I have found it quite possible to enter a stricture after the use of the solution, when I could not do so after the solid caustic. The solution is a much better method of applying the caustic to cases of spermatorrhœa—about which I design to make a few observations in a future No.—having witnessed some most disastrous results from the indiscriminate use of that remedy.

There can be no possible rule laid down for the frequency of caustic applications. As the only object is to subdue irritability, it is but rational to desist when we find it increase upon the second or a subsequent trial; decreasing the quantity and increasing the time between each application, till the true period for its beneficial use is discovered. In cases of spas-

modic action, there is no doubt that the belladonna acts favorably with the caustic, in dissipating that annoyance.

The strong mercurial ointment, reduced, *pro re nata*, with stramonium ointment, I have passed into a stricture, through a hole as large as a mustard seed in the end of a common catheter; this has produced beneficial results, though I doubt not the same would have followed a solution of caustic.

The length of time for the bougie to remain, and the frequency of its application, when used without caustic, is also only to be known by observation of the effect produced; the susceptibility differs extremely in different persons. No possible good can result from pressing these means, when the difficulty and scalding in urinating increases. I have known cases go on successfully to a cure, when the instrument was only used once a week for five minutes each time—applying the caustic each alternate week; and I have had others, where it has been necessary to leave it for an hour or more nightly.

The necessity of leaving them all night, is quite impossible where caustic is used with judgment; it will effect absorption with as much certainty as the pressure of the instrument; and if aided by this, occasionally will be found a far more agreeable means of cure. In my next I shall speak of the causes of failure in treating stricture, and the causes of its frequent return.

New York, March 2, 1847.

PROFESSIONAL CIRCULARS.

To the Editor of the Boston Medical and Surgical Journal.

Sir,—The favor of the famous lithographed circular, so graphically described by your "*Old Subscriber*," in the vicinity of Boston, has been conferred upon us outside sojourners, away back in the country as far as Worcester. We, too, Sir, have been engaged in the practice of medicine and surgery somewhat extensively for a quarter of a century or more, and though we pretend not to be proficients in all the novelties of modern medical science, we are not *entire* strangers to *auscultation* and other methods of *diagnosis*. We have read, not only your Journal every week from its commencement, but before that we were readers of the *old* New England Journal of Medicine and Surgery (a work, by the way, which ought not to be forgotten); and we have had access to *some other* sources of medical intelligence, both domestic and foreign. Besides, Sir, we have had some opportunities at the bedside of the sick, for improvement—some experience in "diagnosis, prognosis and course of treatment;" but, Sir, we *feel* and *confess* our imperfections, we have not walked the wards of a Parisian hospital, and we must make our most grateful acknowledgments to our *young friends* in Boston for the aid and advice so kindly proffered us in their circular. We were reminded by it of a remark made by a good lady to one of us, some while ago. Speaking of a young gentleman (the son of an eminent physician), who had

taken his medical degree a week or two before, and whose growing fame began to be whispered about the neighborhood, she said, "she supposed, of course, he had all his father's knowledge to begin with, and *she was sure that must* make him a skilful physician." Mr. Editor, we have seen an old maxim somewhere (we believe it was first uttered by Lord Bacon, but are not sure) which was on this wise—"Young men for war, but old men for counsel." But this ancient maxim is likely to be reversed in this enlightened age. We shall be treated with pure sack, with no lime in it.

Yours,

February, 26, 1847. BARDOLPH, PETO AND POINS.

MATICO.

[MR. BURNETT, who keeps the matico, has kindly handed us the copy of a letter from Dr. Ruschenberger, dated at the U. S. Naval Hospital, New York, February 4, 1846, which fully explains the history and medicinal properties of this article.]

The *matico*, *yuba del solado*, Piper Angustifolium, which has within two or three years past attracted the attention of the medical profession in England, was first brought to the United States by myself in 1834. It is said to have been accidentally discovered in 1824, at the battle of Ayacucho, by a soldier who was severely wounded, and in his anxiety to staunch the flow of blood, he pulled the leaves growing within his reach, and applied them to the wound, and the bleeding instantly ceased. He communicated the discovery to his wounded companions, who found its application equally efficacious. In Peru and Bolivia it became well known as a styptic, and has been externally used in the treatment of ulcers, but, so far as I can learn, it has not been employed internally up to this time.

I have used it internally in tincture, two ounces to the pint, prepared by displacement; in powder, in doses of a drachm mixed in a wine glass of water, repeated every two hours, in uterine hæmorrhage; and in cold infusions (by displacement) half an ounce to the pint. It exerts a remarkably beneficial influence in menorrhagia, hæmatemesis, hæmoptycis, leucorrhœa, catarrhus vesicæ, and irritable bladder. It does not offend the stomach when given in powder or infusion (dose a wineglassful); in tincture, in drachm doses, is not complained of, but when carried to a half ounce I have seen it produce nausea. I have seen it arrest bleeding instantly from small arteries, even while the blood flowed in jets, and after lint, pressure, &c., had totally failed. To arrest the bleeding from leech bites, and the troublesome hæmorrhage which sometimes follows the extraction of a tooth, I think it will be found a very certain remedy. When used to arrest bleeding, it should be in coarse powder and moistened with cold water. A strong tincture, four ounces to the pint, might possibly answer. The taste is not unpleasant.

This is a hasty outline of my experience, which is confirmed by that of Dr. Munro, of Dundee; Dr. Jeffreys, of Liverpool; and Dr. Hunter

Lane, of Lancaster, as you may see by reference to the eighth part of Braithwaite's Retrospect of Practical Medicine and Surgery (1844, New York) page 37. You will find a notice of the article in the second American edition of Pereira's Materia Medica, edited by Professor Carson, vol. 2, page 222.

There is, I believe, no matico in the United States on sale at this time, although the Medical Journals contain occasional notices of its employment in England. I am fully persuaded that its virtues are such as to warrant me in recommending it to the profession for examination and trial. A part of what I have recently received I have forwarded to you.

There are two varieties of matico known: one is the matico hoja redonda (round leaved matico); and the other, matico hoja puntiaguda (pointed leaved). The latter is considered the best, and is the kind sent to you.

Specimens of matico have been presented by me to several medical friends in Philadelphia.

THE BOSTON MEDICAL AND SURGICAL JOURNAL.

BOSTON, MARCH 10, 1847.

Closing of Medical Lectures.—On Tuesday, of last week, Dr. Warren gave the last of the medical lectures in the Massachusetts Medical College, for the season. A general impression was abroad that it would be the last that distinguished professor would ever deliver in the College. Quite an assembly, therefore, of the medical gentlemen of the city, congregated in the anatomical theatre, where they listened to an elementary series of demonstrations illustrative of the general structure of the teeth in man and some of the lower animals, including these organs in the fossil elephant and mastodon. The discourse finally took a desultory turn into the reminiscences of the speaker, in which some curious topographical facts were related to explain the character and customs of the physicians of Boston fifty years ago. Not the least allusion was made to the much-talked of resignation, nor an intimation given that any changes were in contemplation. At the termination of the discourse, the audience were invited to partake of an elegant collation in a contiguous hall, where some excellent things were said, in a spirit that indicated the good fellowship of the members of the profession in the city, and the devotion of the whole to the best interests of humanity. Dr. George Parkman, at the head of the table, was particularly happy in his observations, and it gives us a feeling of gratification to record the continued interest of that opulent and kind-hearted man, in the onward course of literature, science, and broad-cast philanthropy.

Jefferson Med. College—Multiplication of Medical Schools.—Prosperity characterizes this institution to a remarkable degree. Four hundred and

ninety-three students were matriculated the present season. One year ago, one hundred and seventy were graduated on one occasion. Four gentlemen received honorary degrees. Formerly, prosperity in medical affairs was supposed to be based on monopoly; hence the strongest manifestations of wrath—always for the public good—when the idea of another school, in the same State, and particularly in the same city, was suggested. We have watched these exhibitions for years, and invariably notice that when a rival school makes its appearance, instead of injuring the prospects of the first, both succeed far better than one ever did alone. The history of the medical colleges of Philadelphia demonstrates the fact, that with the multiplication of facilities, or, in other words, by increasing the number of medical schools, students have increased in a corresponding ratio—gaining for that city the enviable distinction of being the focus of medical science in America. What if a narrow policy had governed the Legislature of Pennsylvania, and no charter had been granted for any of those active, energetic institutions, which give character to Philadelphia, because they would interfere with the success of the University of Pennsylvania? When the University School went into operation in New York, the outcry was great, on account of the ruin it would bring upon the old College of Physicians and Surgeons. But that was not all—the most cogent argument brought forward, and which, at first, carried a degree of weight with it, was that another school was not required. The two schools went on in the legitimate business of instruction, and the result has been that more students now gather in New York, every lecture season, than were ever there before—or would have gathered there for a long time to come, had one unstimulated, dignified monopolist remained alone in the field. Every-day life is full of such illustrations of the value of honorable competition. Should the period ever arrive when a second medical school could be organized in Boston, it would not, we imagine, in the remotest degree, prove injurious to the admirable one whose reputation is as extensive as the fame of its faculty. The tendency would be to increase the number of students, annually, till the aggregate would vie with the catalogues of New York. And why not? Where are there medical charities of higher character, or facilities superior?

Mortality of the City of Lowell.—In Lowell, the Manchester of America, with a dense manufacturing population, which make the bulk of the inhabitants, the regulations of the different corporations are so strictly sanatory, that a mortality beyond the usual standard is not likely to occur. Dr. A. H. Brown, the City Physician, has made a methodical report, creditable to himself, and worthy of being imitated by his official neighbors in other towns. While some bills of mortality are so technical that not one in two hundred can understand them, the nomenclature of diseases in others is in the plainest English terms known in the language. We do not pretend to say which of the two systems is best, but feel persuaded that since these documents are published expressly for the information of the whole body of citizens, it is better to have them in their own tongue, than in a compound of Greek and Latin.

In 1846, Lowell contained 28,841 inhabitants. The deaths were 690. There was one death, therefore, to every 41.78 persons. Pulmonary consumption, as every where in New England, swept off the greatest number, and scarlet fever was the next active agent in destroying human life. On

the whole, Lowell is in the enjoyment of an amount of public health highly favorable to an increase of population, wealth and influence.

Columbus, Ohio, Medical College.—By a recent act of the legislature, the Medical School of Willoughby University has been removed to Columbus, the seat of Government. The new board of trustees have organized and made the following appointments:—Anatomy and Physiology, J. P. Judkins, M.D., of Cincinnati; Surgery, R. L. Howard, M.D., Columbus; Chemistry, Rev. F. Merrick, Delaware; Obstetrics and Diseases of Women and Children, H. H. Childs, M.D., Massachusetts; Pathology and Practice, J. Butterfield, M.D., Columbus; Materia Medica and Therapeutics, T. R. Spencer, M.D., New York; Medical Jurisprudence and Insanity, S. M. Smith, M.D., Columbus. On motion, it was *Resolved*, That the fees for a full course in the medical department, shall be fifty-five dollars; the matriculation fee, three dollars; and the graduation fee, twenty dollars. Dr. J. Butterfield was appointed Dean of the Faculty.

Prison Practice.—Having mislaid the annual legislative document in which Dr. Bemis reports upon the sanatory condition of the State Prison, at Charlestown, the past year, we can only speak from an imperfect recollection of his observations. It appears that there has been but very little sickness—that by the aid of the system of dietetics adhered to in that institution, and the other details of every day life in regard to the prisoners, which have been established by the good and discreet advice of a conscientious, well-informed medical officer, the health of the prison has been admirably maintained.

Cauterizing the Larynx.—To the Editor, &c. Dear Sir,—In the volume of Johnson's Review for the year 1828! it will be seen that the "discovery" of cauterizing the larynx, with solutions of nitrate of silver by means of a probang and sponge, is there distinctly described and taught, by the editor himself, as successfully used by himself and others in chronic laryngeal disease. It might trespass upon your columns, else I would send you the identical extracts which anticipate Dr. Green not only, but Trousseau and Belloc; and throw still greater obscurity over that celebrated conversation reported to have taken place ten years after between Dr. G. and this same Dr. Johnson, in which the novel idea was thrown out by the latter, which is said to have resulted in Dr. G.'s book on Bronchitis! G.

New York Correspondence.

New York Hospital.—The Annalist of last week contains a letter from Dr. Vandervoort, the librarian of the Institution, rebuking, in courteous but expressive language, the "erroneous and unjust statements" of the New York Medical and Surgical Reporter, in reference to the cliniques, which are *daily* accessible to the students in the walks of that Hospital. He charges the writer with utter "ignorance, or wilful misrepresentation." This manly defence of the physicians and surgeons of the Hospital is creditable to the worthy librarian, whose disinterested position enables him to

testify in behalf of those who, however assailed, do not condescend to self-vindication, and ought not, when anonymously or irresponsibly censured.

The "Reporter," in responding to the respectful inquiries of this Journal for the data upon which so censorious strictures had been made upon the medical officers of the Hospital, refers us to the strictures of its own pages of one or more cases of what appears to be "bad surgery;" but such isolated cases, even if fairly reported, would fail to justify the imputation of indiscriminate deficiency in "intellect, enterprise, and surgical reputation," to the physicians and surgeons of the House, of which we ventured a doubt. Much less does such an answer fortify the allegation of their notorious "unpopularity," as charged in the article referred to.

Dr. Vandervoort's letter denies the truth of the strictures in the "Reporter" in express terms; and if we are correctly informed, instead of "twenty students," as alleged, there are over a hundred this year, as there were last year, who take the Hospital ticket and attend upon the cliniques. It seems, however, that the students generally do not appreciate the advantages of true clinical instruction worthy the name, else none of them would be content with the college cliniques alone. The issue being now fairly made upon matters of fact, between the Annalist and the Reporter, we forbear to say more at present.

Surgical Operations after Ethereal Inhalation.—Dr. J. K. Rodgers has lately performed two amputations, upon patients to whom the ether had been administered by inhalation; one of these being rendered unconscious of pain thereby, while the other is represented to have been a failure. Whether it was because it was simply "inhaled from a sponge," without the apparatus contrived at Boston for the purpose, does not appear. The Annalist seems to rejoice that the pure sulphuric ether was used, "*not* the patented Letheon;" and he records that Mr. Liston, of London, did so too. What if it should turn out that the "patented Letheon" is that identical "washed ether"? Then a question of casuistry, which would puzzle a Jesuit, or a Philadelphia lawyer, will have been mooted. Ought humanity to be deprived of this new method of using ether, because one of our Yankee neighbors unluckily patented his apparatus and discovery? The ethics of the profession in such case might conflict with the will of their patients, and may possibly have to succumb to the latter.

The successful employment of sulphuric ether by eminent surgeons in Europe has served to moderate the vehemence of tone with which the early experiments with this novelty had been denounced. Sober men begin to think, that even if its having been patented, was unprofessional, or even absurd as some allege, still the use of this agency may be lawful hereafter, especially as it is now conceded that there is no secret about it.

The Medical Profession in New York.—The profession in New York would seem to have simultaneously received a new impulse of late, as evinced in the ardor and enterprise with which they are cultivating the science and laboring for its advancement. The recent Academy of Medicine organized so happily, has already enrolled a majority of the regular physicians, and as the only conditions of membership are, a reputable standing in the profession, and a trifling annual tax, it must soon include all the real respectability of the fraternity. A line will thus be drawn, beyond which will be found the motley group of botanicals, Thomsonians, homœopathists, hydropathists, chrono-thermalists, mesmerists, clairvoyants, and Indian doctors,

and those who choose to *consult* with such; an amalgamation from which Fellows of the Academy are prohibited by self-respect, as well as by their rules. It is rumored that preliminary steps have been taken by these kindred spirits to get up an organization *se defendendo*, on real democratic principles, by opening their door to the largest liberty, and embracing all these different tribes and sects, whose "fellow-feeling makes them wondrous kind," and whose common "proscription" by the "regulars," in refusing fellowship with such, has raised a clamor against the Academy for its "aristocracy." The public will be greatly benefited by recognizing this "opposition line" as soon as they thus "show their colors;" for those who prefer a "somnambulist clairvoyant," or a "seventh son of a seventh daughter," or an "astrologist," for their doctor, will know in which group to look for him, and can be accommodated with either.

But there are other unmistakable signs of progress in the activity of the younger members of the profession, in private and associated teaching, to an extent unparalleled in any other of our sister cities. The pages of the Annalist, in each of its Nos., exhibits the zeal and success of the Medical and Surgical Society, and the Pathological Society; both of which are manifesting a spirit of enterprise highly commenable, and contributing valuable materials to the profession, while laboring for their mutual improvement. The bi-weekly reports of the transactions of these Societies, and of the surgical cliniques of both the Colleges, furnished by the same Journal, are highly interesting both to students and practitioners; and confirm the opinion that medical science has received a new impulse which angurs well for New York.

We learn that the New York Academy of Medicine have unanimously chosen Dr. John W. Francis as their anniversary orator, for the present year. This result of their recent election has given universal satisfaction.

Insensibility to Pain from a Hot Iron.—An exhibition of extraordinary interest to humanity occurred at the Massachusetts General Hospital on Saturday last. A patient was presented—a man in advanced life—who, we understand, was laboring under paraplegia, having its origin in a caries of the lower dorsal vertebra—for which Dr. Warren proposed the actual cautery. After the patient had inhaled the letheon, Dr. Warren run an iron rod, heated to a white heat, to the length of about two feet, up and down the back, each side of the spine,—burning two lines on one side and one on the other, and then carried it zigzag across, between the spinous processes, the same distance. The patient during this process was wholly unconscious of pain, under the severest test to which he could be subjected —that of a hot iron applied to the naked skin.

To CORRESPONDENTS.—A paper on "The latest form of Empiricism," and Dr. Banister's case of a foreign substance in the trachea, have been received.

ERRATUM.—Page 52, line 10, for "last three months," read last three *fall* months.

Report of Deaths in Boston—for the week ending March 6th, 54.—Males, 31—females, 22. Stillborn, 6. Of consumption, 8—typhus fever, 11—lung fever, 4—brain fever, 1—disease of the heart, 3—burns, 1—hooping cough, 2—marasmus 3—croup, 2—canker, 1—infantile, 4—dropsy, 1—inflammation of the bowels, 1—apoplexy, 1—disease of the bowels, 1—disease of the brain, 1—debility, 2—convulsions, 3—scarlet fever, 1—dropsy on the brain, 1—rheumatic fever, 1—old age, 1.

Under 5 years, 22—between 5 and 20 years, 3—between 20 and 40 years, 15—between 40 and 60 years, 7—over 60 years, 7.

Medical Intelligence.

Ventilation of School Houses.—A report presented to the School Committee, on the ventilation of the school houses in Boston, just published by Mr. Eastburn, is the valuable paper, of commanding importance. Although it appears as a report of a committee, Dr. Henry G. Clark is the author. We have not room to present his plans, nor is it convenient to transfer his reasonings to these pages, although we heartily approve of both. Dr. Clark was successful in convincing the city government of the necessity of furnishing children in the public schools with vitality as well as masters, which is a triumph over a score of official predecessors.

Lady Abettors of Quackery.—"How do you account for the fact," says a correspondent in Kentucky, "that, in ninety-nine cases out of a hundred quackery owes its popularity to 'the ladies'? It is emphatically true in Kentucky, and I have observed farther that the zealous advocates of new systems of physic are generally those who have an abiding faith in mesmerism, believe in 'live forever Jones,' and *had* a strong proclivity towards Millerism. It is surprising to witness the assiduity with which one of these ladies devotes her time to the business of huckstering for the interests of her satellite. Wo unto all regular practitioners who have patients within her reach! Her carriage is at the service of every invalid who will permit her to introduce 'her doctor' (Herr Bubo Von Stinkenberg!), who cured her of the gripes, after she had been given up to die by all the regular doctors; who relieved Betsy Smith of a 'drapsy' of twenty years standing, in six hours! and literally raised 'poor Polly Bean from the grave,' by curing her of a 'gallopin' consumption,' which had destroyed two 'globes' of the right lung, and more than half the left! Who could resist such evidence as this, especially when it comes from the lips of a pious Mrs. Gadabout, who is a teacher in the Sunday School, and a member of fifteen benevolent and moral reform societies! Heaven save the mark!"

Medical Miscellany.—The committee of the legislature of New York have reported a bill in favor of giving the Deaf and Dumb Institution, $25,000; the Blind, $17,500; New York Hospital, 22,500; the New York Dispensary, $4,500, and the Marine Hospital, $5,000.—Dr. Alexander, of Charleston, Virginia, relates the case of a person, who lived 78 hours after being stabbed so that the instrument passed entirely through the left ventricle of the heart, entered the pericardium and finally wounded the diaphragm.—Dr. Edson, the living skeleton, who recently died, weighed but 49 pounds. A post-mortem examination showed the lungs slightly affected.—Hon. Dixon H. Lewis, of the U. S. Senate, supposed to be the fattest man in the country, weighs 400 pounds.—Dr. Charles W. Parsons, of Providence, R. I., recently amputated a leg, while the patient was under the influence of the letheon. A writer commenting upon it, remarks, "This case suggests a doubt whether the letheon is safe in cases of great exhaustion of strength previous to an operation. The asphyxia produced by it, added to the shock of the operation, may entirely prostrate the vital powers, causing immediate death. The carbonized appearance of the blood, suggests the utility of oxygen gas, administered as soon as the painful part of the operation is over."—The New York Annalist says, "The Massachusetts Medical Society has finally decided to send delegates to the Convention. Second thoughts are best, and we hope that some day they may change their minds about the ethics of the patent right."